



CARNOW, CONIBEAR & ASSOC., LTD.

Occupational and Environmental Health Consultants

333 West Wacker Drive, Suite 1400, Chicago, IL 60606, 312/782-4486

US EPA RECORDS CENTER REGION 5



496945

August 14, 2000

Ms. Kelly Kennoy
City of Chicago
Department of Environment
30 N. LaSalle, 25th Floor
Chicago, IL 60602

Dear Ms. Kennoy:

This letter presents the results of the Carnow, Conibear & Assoc., Ltd. (CCA) site investigation for Intermodal Facility, the property. The property is located at 4801 South Morgan Avenue, Chicago, Illinois 60609, Section 8, Range 14 East, Township 38 North (Exhibit I).

The objective of the site investigation was to identify the characteristics of the subsurface soil. CCA's scope of work consisted of the following tasks:

- Advance eight (8) borings to depths between two (2) and twenty (20) feet to natural materials in order to characterize the subsurface conditions of the fill on site;
- Estimate the volume of the fill materials on site;
- Provide a cost estimate to remove and dispose of the surface debris piles;
- Prepare a report documenting the site investigation.

CCA retained CS Drilling, Inc. of Addison, Illinois to perform the soil borings at the property. The drilling activities were conducted on June 30 and July 10, 2000. Erin Menig of CCA was present on site during the drilling activities.

A total of eight (8) soil borings were performed during the site investigation. The locations of the borings were chosen in an effort to adequately represent the subsurface of the entire site. Borings ranged in depth from two (2) to twenty (20) feet below ground surface (bgs). CCA's field representative classified each soil sample in terms of texture and color in accordance with the Unified Soil Classification System (ASTM D-2487-85 and D-2488-84).

A refusal was encountered in boring B2a and B2b which were located in the northeast corner of the site. Based on field observations, construction debris consisting of concrete and asphalt appears to be present on that area.

Ms. Kelly Kennoy

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August 14, 2000

The fill material appears to be present at the surface and extends to a depth of ten (10) to fifteen (15) feet. The fill material include asphalt, concrete, brick, gravel, wood, coal, decomposed organics, clay, glass, and metal. Suspect asbestos containing materials were also observed in the fill materials. The first native material encountered consisted of an organic silt. This silt was moist to wet, with some sand and gravel. Beneath the silt, at approximately fifteen (15) to twenty (20) feet bgs, was a layer of soft silty clay or clayey silt with trace shale and sand. Exhibit I shows the location of the soil boring on site. Exhibit II presents copies of the soil boring logs. Exhibit III presents cross sections of the subsurface soil on site.

Based on our field observations, the fill materials would like be disposed of as special waste. The total volume of fill materials is approximately 245,000 cubic yards. This includes 110,000 cubic yards above the existing surface grade of the building and 135,000 cubic yards below the existing building surface. The cost estimate to remove and dispose of all fill materials above the building surface is between \$5,000,000 and \$5,500,000, while the cost estimate to remove the remaining fill materials is between \$6,000,000 and \$6,500,000. The total cost estimate to remove and dispose of all fill materials is between \$11,000,000 and \$12,000,000.

Should you have any questions regarding this letter, please call us at 312-762-2903.

Sincerely,

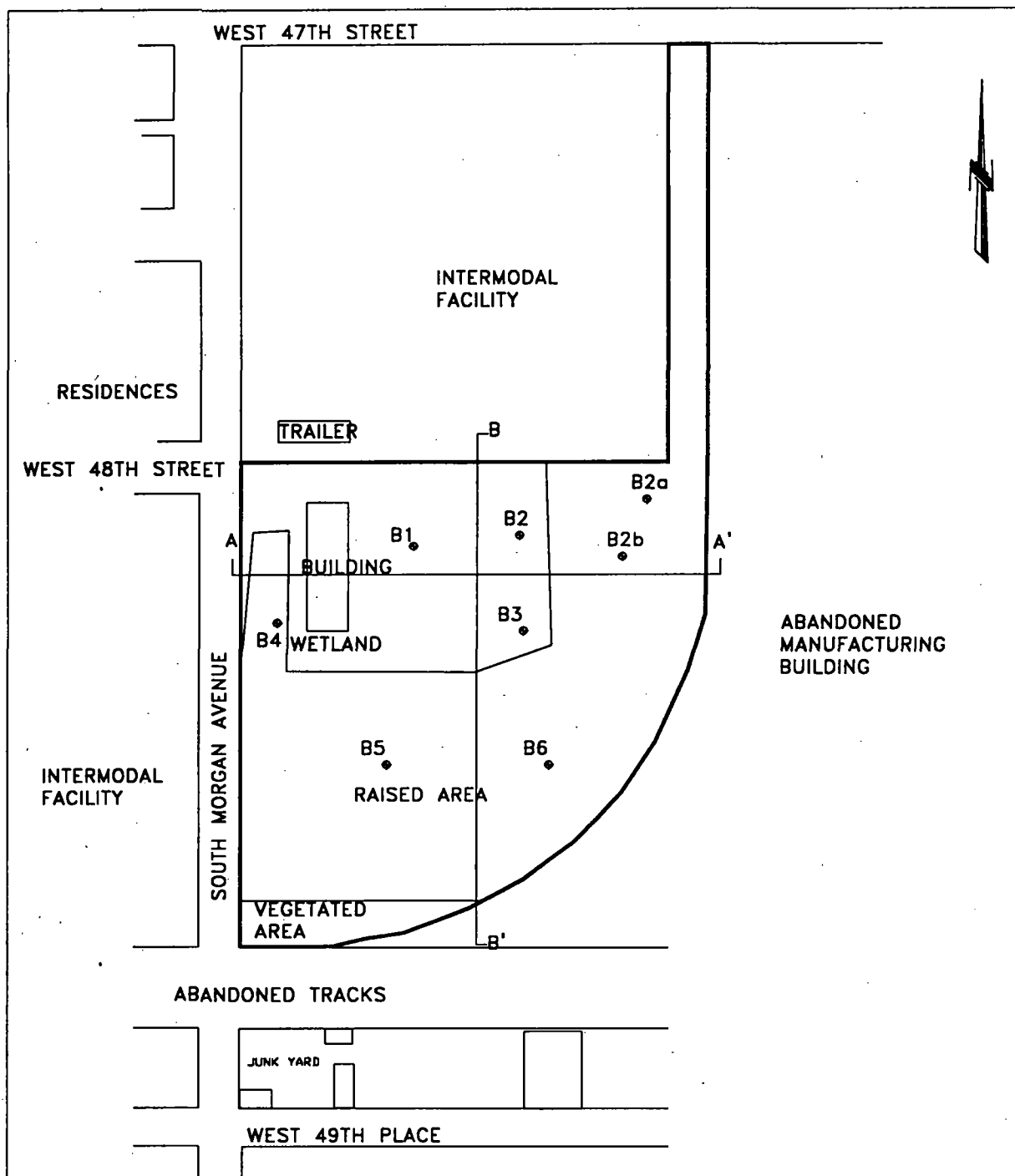
CARNOW, CONIBEAR & ASSOCIATES, LTD.



Erin Menig
Geologist



Ala E. Sassila, Ph.D., P.E.
Vice President



CARNOW, CONIBEAR & ASSOC., LTD.

ENVIRONMENTAL ENGINEERING DEPT.
333 West Wacker Dr. Suite 1400
Chicago, IL 60606
PHONE (312)782-4486
FAX # (312)782-5145

EXHIBIT 1 - SITE PLAN
INTERMODAL FACILITY
4801 SOUTH MORGAN AVENUE
CHICAGO, ILLINOIS

DRAWN BY: EZM
CHECKED BY: AES

DATE: 7/5/00
SCALE: 1" = 200'

SOIL BORING LOG

Site Name: Intermodal Facility
Address: 4801 South Morgan
Chicago IL

CCA Job Number:
E129510028

Page 01 of 01

Boring Number: B1

Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	HS		1	ASPHALT AND CINDERS	-	-	-	WET ▼
			2					
2	HS		3	FILL: CLAYEY GRAVEL	-	-	-	
			4	TRACE PAPER				
3	HS		5		-	0.5	-	
			6					
4	HS		7		-	0.5	-	
			8					
5	HS		9		-	0.5	-	
			10	BROWN AND BLACK LOAM WITH SOME GRAVEL AND ORGANICS(OL)				
6	HS		11		-	0.5	-	WET ▼
			12	BROWN AND BLACK ORGANIC SILT, SOME SAND AND GRAVEL (OL)				
7	HS		13		-	0.5	-	
			14					
8	HS		15	BROWN AND GRAY SILT, TRACE	-	0.5	-	
			16					
9	HS		17	BROWN AND GRAY SILTY CLAY, TRACE SAND AND SHALE (CL)	-	0.75	-	
			18					
10	HS		19		-	0.75	-	
			20	END OF BORING @ 19 FEET				
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling 11 FEET

▽ Depth After Drilling 3 FEET

Geologist: EM

Driller: C.S. DRILLING

Legend: SS: Split Spoon

GP: Geoprobe

HS: Hollow Stem Auger



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Chicago, IL 60606

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FAX # (312)782-5145

SOIL BORING LOG

Site Name: Intermodal Facility
Address: 4801 South Morgan
Chicago IL

CCA Job Number:
E129510028

Page 01 of 01

Boring Number: B2b

Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	GP		1	ASPHALT	-	-	-	
			2					
2	GP		3	CONCRETE	-	-	-	
			4					
			5	END OF BORING @ 4 FEET				
			6					
			7					
			8					
			9					
			10					
			11					
			12					
			13					
			14					
			15					
			16					
			17					
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY
▽ Depth After Drilling DRY

Geologist: EM
Driller: C.S. DRILLING

Legend: SS: Split Spoon
GP: Geoprobe
HS: Hollow Stem Auger

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SOIL BORING LOG

Site Name: Intermodal Facility
Address: 4801 South Morgan
Chicago IL

CCA Job Number:
E129510028

Page 01 of 01

Boring Number: B2a

Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	HS		1	ASPHALT	-	-	-	
			2					
2	HS		3	CONCRETE	-	-	-	
			4	END OF BORING @ 4 FEET				
			5					
			6					
			7					
			8					
			9					
			10					
			11					
			12					
			13					
			14					
			15					
			16					
			17					
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: EM

Driller: C.S. DRILLING

Legend: SS: Split Spoon
GP: Geoprobe
HS: Hollow Stem Auger



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SOIL BORING LOG

Site Name: Intermodal Facility
Address: 4801 South Morgan
Chicago IL

CCA Job Number:
E129510028

Page 01 of 01

Boring Number: B2

Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	HS		1	ASPHALT AND CINDERS	-	-	-	MOIST
			2					
2	HS		3	CONCRETE SLABS WITH REBAR	-	-	-	
			4					
3	HS		5	FILL: BRICK, GRAVEL, CINDERS TRACE WOOD, METAL, AND PLASTIC	-	<0.5	-	
			6					
4	HS		7		-	<0.5	-	
			8					
5	HS		9	FILL: CINDERS WITH CLAY	-	<0.5	-	
			10					
6	HS		11		-	<0.5	-	
			12					
7	HS		13	BROWN AND BLACK VERY FINE SAND AND SILT WITH ORGANICS	-	0.5	-	MOIST
			14					
8	HS		15		-	0.5	-	
			16					
9	HS		17	BROWN AND GRAY CLAYEY SILT TRACE GRAVEL AND SAND (ML)	-	0.75	-	
			18					
10	HS		19		-	0.75	-	
			20					
			21	END OF BORING @ 20 FEET				
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: EM

Driller: C.S. DRILLING

Legend: SS: Split Spoon
GP: Geoprobe
HS: Hollow Stem Auger



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SOIL BORING LOG

Site Name: Intermodal Facility Address: 4801 South Morgan Chicago IL	CCA Job Number: E129510028	Page 01 of 01
	Boring Number: B3	Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	HS		1	GRAVEL	-	-	-	
			2					
2	HS		3	FILL: GRAVEL, BRICK, CLAY, TRACE PAPER	-	-	-	
			4					
3	HS		5	FILL: CLAY, GRAVEL, BRICK, TRACE WOOD, METAL, AND RUBBER	-	<0.5	-	
			6					
4	HS		7		-	<0.5	-	
			8					
5	HS		9	FILL: CINDERS AND ASPHALT	-	<0.5	-	
			10	DARK BROWN MOIST CLAY AND SAND WITH GRAVEL AND SILT	-	-	-	
6	HS		11					
			12	FILL: CINDERS AND ASPHALT	-	0.5	-	
7	HS		13	BROWN AND BLACK SILT AND ORGANICS, TRACE SAND AND GRAVEL (OH)	-	0.5	-	
			14					
8	HS		15		-	0.5	-	
			16					
9	HS		17		-	0.5	-	
			18					
10	HS		19		-	0.5	-	
			20	END OF BORING @ 20 FEET				
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data ▼ Depth While Drilling <u>10 FEET</u> ▽ Depth After Drilling <u>UNKNOWN</u>	Geologist: <u>EM</u> Driller: <u>C.S. DRILLING</u> Legend: SS: Split Spoon GP: Geoprobe HS: Hollow Stem Auger	CARNOW, CONIBEAR & ASSOC., LTD. ENGINEERING SERVICES DEPT. 333 West Wacker Dr. Suite 1400 Chicago, IL 60606 PHONE (312)782-4486 FAX # (312)782-5145
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SOIL BORING LOG

Site Name: Intermodal Facility
Address: 4801 South Morgan
Chicago IL

CCA Job Number:
E129510028

Page 01 of 01

Boring Number: B4

Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	HS		1	GRAVEL AND CLAY	-	-	-	
			2					
2	HS		3	FILL: CONCRETE WITH REBAR, TRACE CLAY	-	-	-	
			4					
3	HS		5		-	0.5	-	
			6					
4	HS		7	FILL: ASPHALT, TRACE WIRE	-	0.5	-	
			8					
5	HS		9		-	0.5	-	
			10	BROWN AND BLACK ORGANIC CLAY TRACE GRAVEL AND SAND (OL)				
6	HS		11		-	0.5	-	
			12	BROWN AND GRAY CLAYEY SILT, WITH SOME ORGANICS				
7	HS		13	TRACE SAND (ML)	-	0.5	-	
			14					
8	HS		15	END OF BORING @ 15 FEET	-	0.5	-	
			16					
			17					
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling -

▽ Depth After Drilling -

Geologist: EM

Driller: C.S. DRILLING

Legend: SS: Split Spoon
GP: Geoprobe
HS: Hollow Stem Auger



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SOIL BORING LOG

Site Name: Intermodal Facility
Address: 4801 South Morgan
Chicago IL

CCA Job Number:
E129510028

Page 01 of 01

Boring Number: B5

Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	GP		1	ASPHALT WITH SOME CLAY	-	-	-	
2	GP		2	ASPHALT WITH SOME CLAY, TRACE WOOD AND FIBERGLASS	-	-	-	
3	GP		3		-	-	-	
4	GP		4		-	-	-	
5	GP		5		-	-	-	
6	GP		6		-	-	-	
7	GP		7		-	-	-	
8	GP		8		-	-	-	
9	GP		9		-	-	-	
10	GP		10		-	-	-	
7	GP		13	FILL: WOOD WITH TRACE CLAY AND CINDERS	-	-	-	MOIST
8	GP		15	FILL: BROWN AND GRAY SILTY CLAY, TRACE GRAVEL, SHALE, AND BRICK	-	-	-	
9	GP		17		-	3.0	-	
10	GP		19		-	3.0	-	
			20	END OF BORING @ 20 FEET				
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY
▽ Depth After Drilling DRY

Geologist: EM
Driller: C.S. DRILLING

Legend: SS: Split Spoon
GP: Geoprobe
HS: Hollow Stem Auger



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SOIL BORING LOG

Site Name: Intermodal Facility
Address: 4801 South Morgan
Chicago IL

CCA Job Number:
E129510028

Page 01 of 01

Boring Number: B6

Date: 7/10/00

Sample Number	Sample Type	Sample Recovery	Depth (feet)	Soil and Rock Description	Blow/Counts	Penetrometers (TSF)	PID/FID	REMARKS
1	GP		1	ASPHALT	-	-	-	REFUSAL
			2					
2	GP		3	CONCRETE	-	-	-	
			4					
3	GP		5	ASPHALT, CLAY, AND GRAVEL, TRACE WOOD AND COAL	-	-	-	
			6	ROOFING ASPHALT				
4	GP		7	ASPHALT, CLAY, AND GRAVEL, TRACE WOOD AND COAL	-	-	-	
			8					
5	GP		9	FILL: BROWN & GRAY SILTY CLAY TRACE GRAVEL, ORGANICS ORGANICS AND BRICK	-	-	-	
			10					
6	GP		11	CLAY, ASPHALT, AND GRAVEL, TRACE COAL AND ROOFING	-	-	-	
			12	ASPHALT				
7	GP		13		-	-	-	
			14					
8	GP		15		-	-	-	
			16					
			17	END OF BORING @ 16 FEET				REFUSAL
			18					
			19					
			20					
			21					
			22					
			23					
			24					
			25					

Note: Stratification lines are approximate; in-situ transition between soil types may be gradual

Groundwater Data

▼ Depth While Drilling DRY

▽ Depth After Drilling DRY

Geologist: EM

Driller: C.S. DRILLING

Legend: SS: Split Spoon

GP: Geoprobe

HS: Hollow Stem Auger



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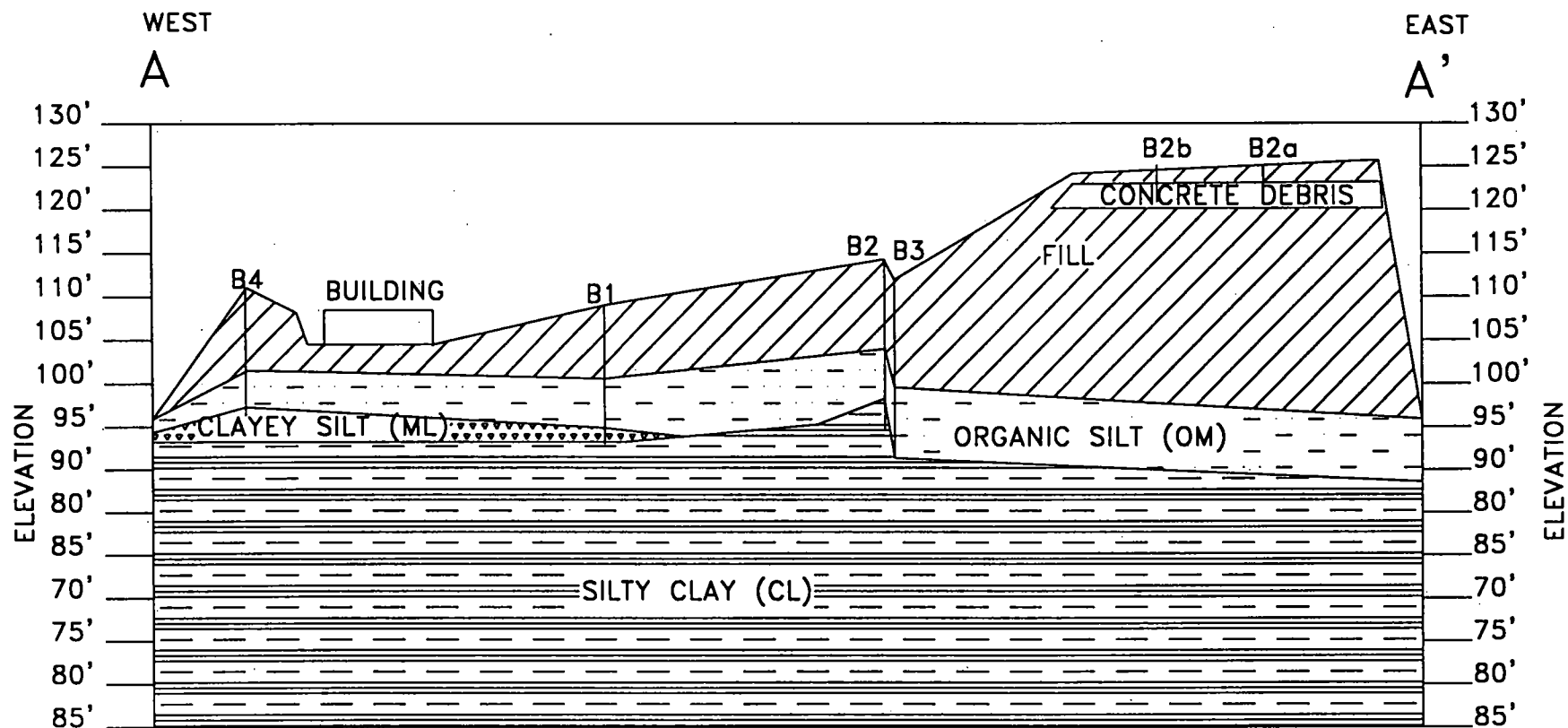
ENGINEERING SERVICES DEPT.

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CROSS SECTION A TO A'

NOTE: ELEVATIONS ARE RELATIVE TO BENCHMARK ASSIGNED AS 100.00 FEET.

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ENVIRONMENTAL ENGINEERING DEPT.

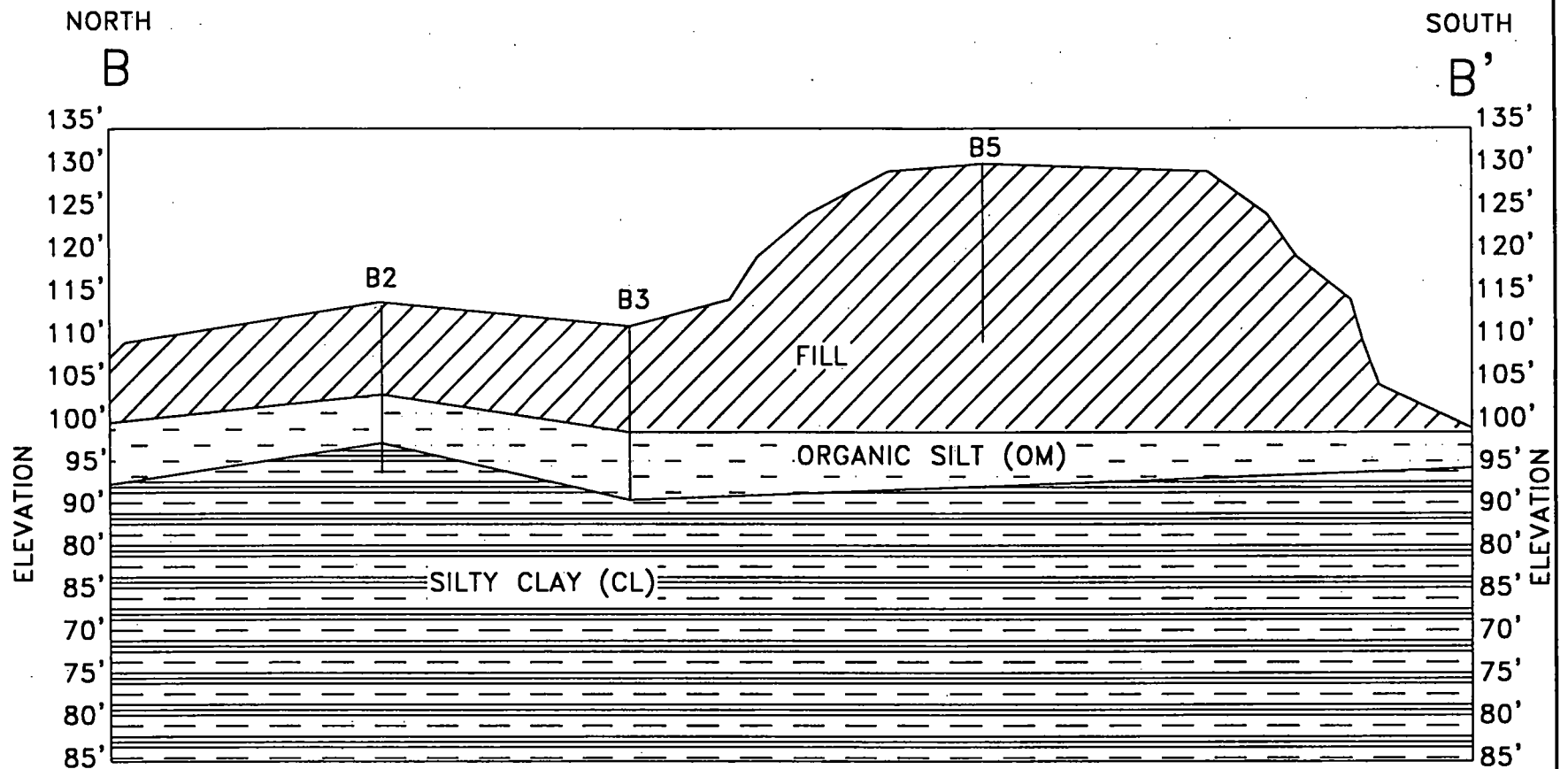
333 West Wacker Dr. Suite 1400
PHONE (312)782-4486

Chicago, IL 60606
FAX # (312)782-5145

EXHIBIT III: CROSS SECTION
INTERMODAL FACILITY
4801 SOUTH MORGAN AVENUE
CHICAGO, ILLINOIS

DRAWN BY : EM
CHECKED BY : AS

DATE : 7/5/00
HORIZONTAL SCALE : 1" = 80'



CROSS SECTION B TO B'

NOTE: ELEVATIONS ARE RELATIVE TO BENCHMARK ASSIGNED AS 100.00 FEET.

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Chicago, IL 60606
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EXHIBIT III: CROSS SECTION
INTERMODAL FACILITY
4801 SOUTH MORGAN AVENUE
CHICAGO, ILLINOIS

DRAWN BY : EM
CHECKED BY : AS

DATE : 7/5/00
HORIZONTAL SCALE : 1" = 80'